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TITLE:

Memory-card application-program debugging process and

debugging system

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ABSTRACT:

CHG DATE=19990617 STATUS=O> The invention relates to systems for debugging chip card (smart card) application programs. It applies to cards including a microprocessor and an electrically programmable non-volatile memory, this memory containing an application program which can be run by the microprocessor. In order to carry out debugging, a very simple system is used which relies on the fact that the memory of the application program is electrically programmable. This memory is used to store, on the one hand,

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provisional and modifiable versions of the application program and, on the other hand, a debugging aid program. In practice the debugging system comprises merely a specimen chip card (30), a card reader (32) and a microcomputer (34) for controlling the exchanges between the card and the reader. The process consists essentially in storing in memory the program to be debugged, in modifying an instruction of this program in order to replace it with a branch instruction to the debugging aid program, and in initiating the application program. The aid program provides information regarding the status of the system at the time of the branching. <IMAGE>